FIELDMANN®
Home & Garden Performance

FZK 2005 E

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Magyarul 53–68
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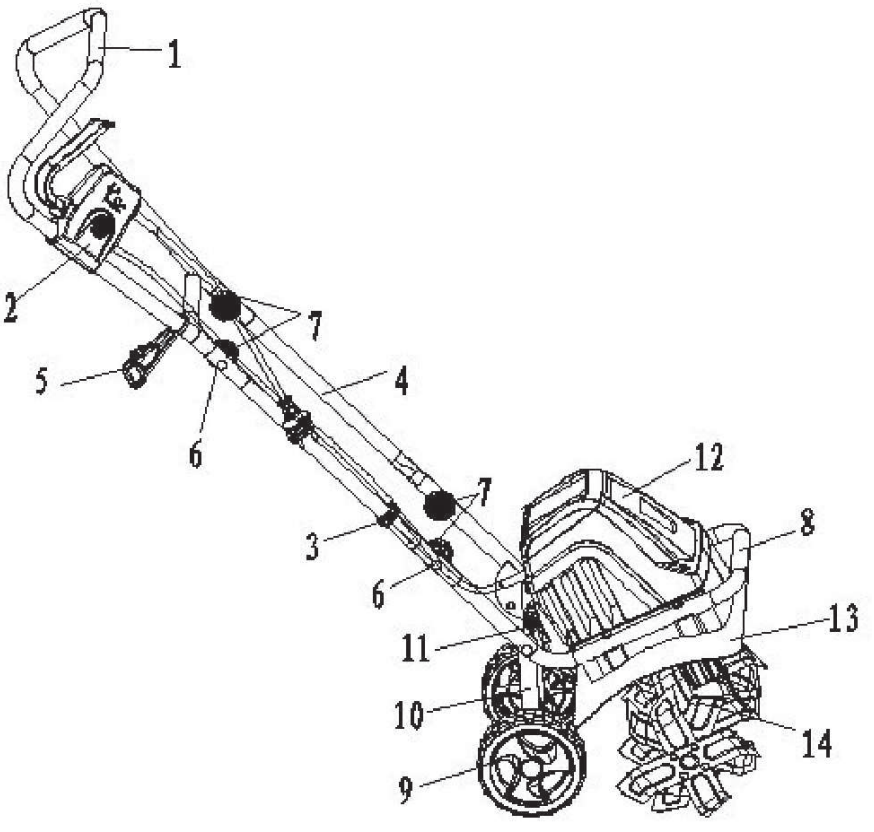

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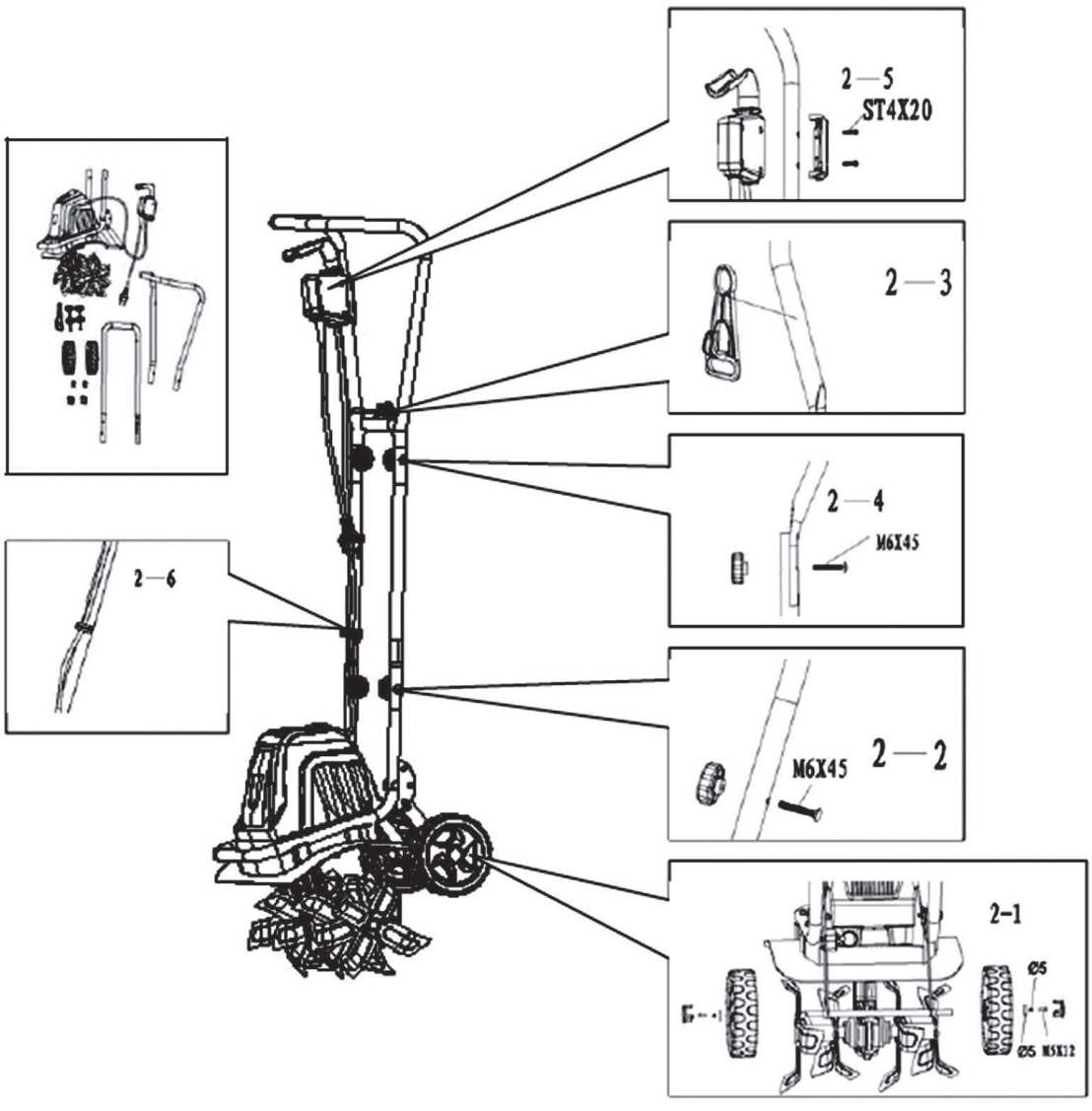

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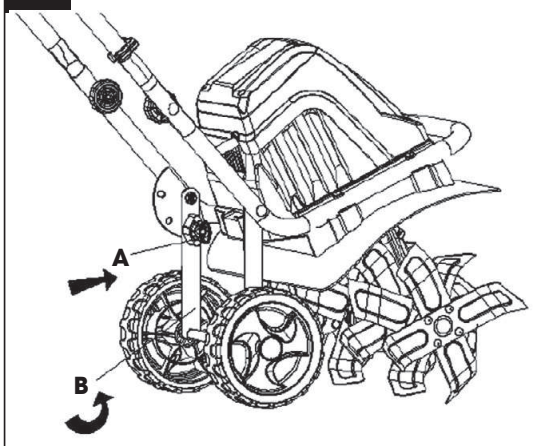

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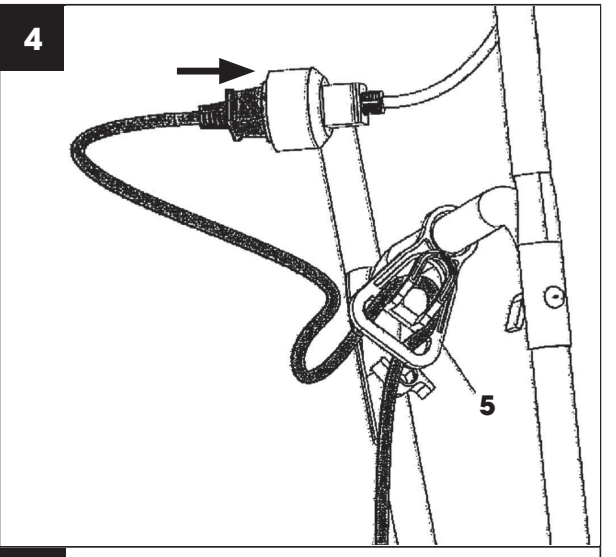

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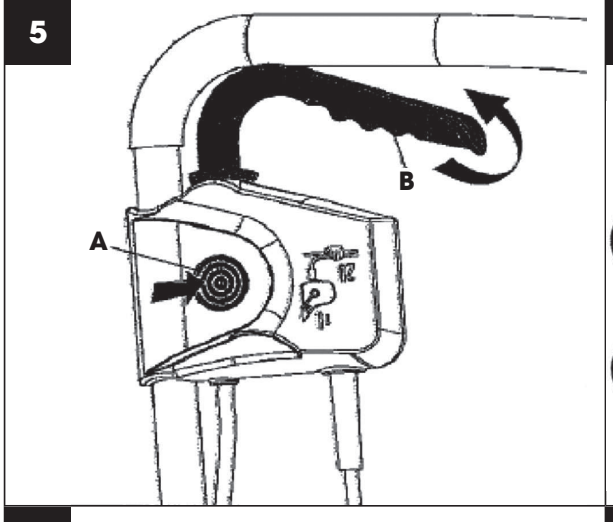

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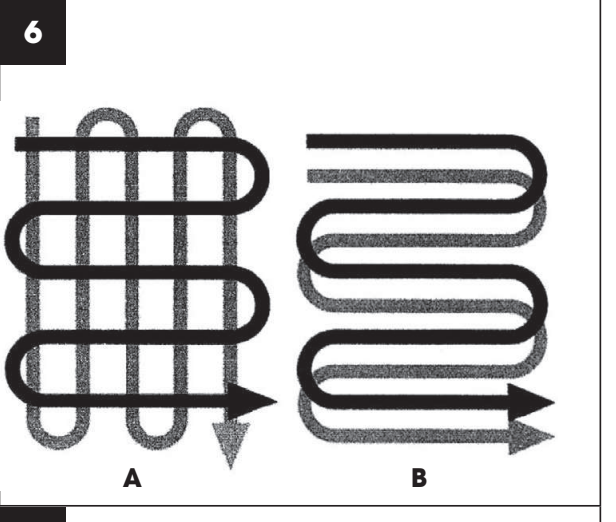

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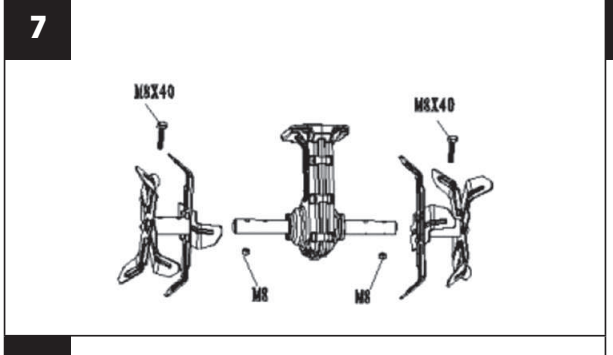

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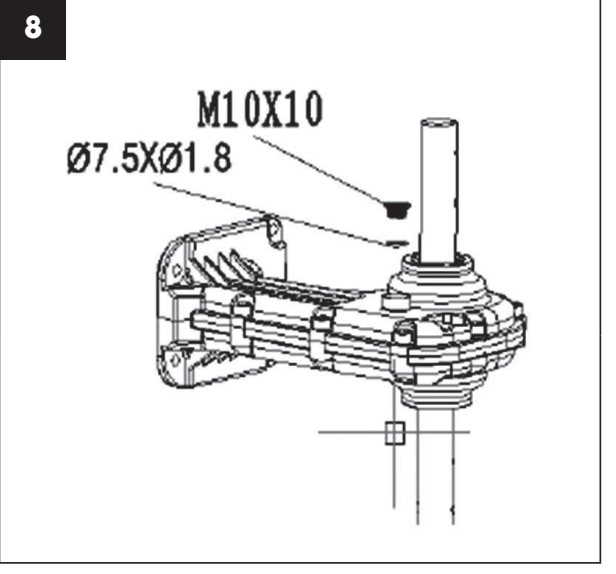

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ELECTRIC TILLER
USER‘S MANUAL

Thank you for purchasing this electric tiller.
Before you start using it, please, carefully read this user's manual and save it for possible future use. This product was designed and built according to our high norms for reliability, ease of use and safety of operation. With proper care, it will give you many years of reliable problem-free service.

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1. GENERAL SAFETY INSTRUCTIONS

Important safety notice

- Carefully unpack the product and take care not to throw away any part of the packaging before you find all the parts of the product.
- Store the product in a dry place out of reach of children.
- Read all warnings and instructions. Not following warnings or instructions may lead to injury by electrical shock, a fire and/or serious injuries.

- Before using, check that everybody that will be using the machine has read and understood these safety instructions and other information contained in this user's manual.

⚠ **NOTE:** Use appropriate hearing protection when using this machine. Under certain conditions and after a certain period of using the machine, the produced noise may cause hearing loss.

Inspection of damaged parts

Before every use, all damaged parts must be carefully inspected to determine whether they will work correctly and fulfil their function. Check the adjustment and fastening of moving parts, damaged parts, fastening elements and other conditions which may affect operation. All damaged parts must be repaired or replaced.

Do not use in a hazardous environment

Do not use the machine in rain, during a storm or in a damp or wet environment. Do not operate the machine in an environment where there are gases or in an explosive environment. The motors on these machines spark during operation and these sparks could ignite the vapours.

Keep out of the reach of children

Bystanders, children and animals must be at a safe distance.

Dress appropriately

Do not wear loose clothing and jewellery and keep long hair inside a protective mesh cap. They could become caught in the moving parts. When working outside, it is recommended to wear rubber gloves and solid footwear.

Use safety glasses

When using this product, wear safety glasses with protective sides. In the case of a dusty environment, use a face mask or respirator.

Double insulation

The tiller is equipped with double insulation. This means that all metal parts are insulated from the electrical power supply. This is achieved by an insulating layer between the electrical and mechanical parts. Double insulation provides you with the highest possible level of safety.

Extension cord
Check that the extension cord is in good condition. When using an extension cord, make sure that it is sufficiently strong so that it can carry the necessary current for powering the machine. An extension cord with insufficient dimensions will result in a reduction of power voltage, which will result in reduced performance and overheating.
The extension and power cord can be tied together using a knot to prevent them from disconnecting when the machine is being used. Tie the knot as shown in figure 9, then insert the plug on the power cord into the socket on the end of the extension cord. In the same way, you can join two extension cords.
Be careful with the extension cord when working with the tiller. Take care not to trip over the power cord. The power cord always goes away from the blades of the tiller.

Overheating protection
If the tiller is blocked by a foreign object or its motor is overloaded, a safety mechanism will automatically turn the motor off. Release the start lever and wait until the motor cools down (approximately 15 minutes) before starting the tiller again.

Disconnect the machine from the power supply if you will not be using it, if you are going to wash or repair it. Do not leave it without supervision.

Do not damage the power cord
Never carry the machine by the power cord or tug on it in order to pull it out of the power socket. Protect the power cord against heat, oil and sharp edges.

Use the machine properly
Do not use this appliance for other purposes than those for which it is intended (see chapter "Purpose of use").

Do not overestimate your abilities
Lead the tiller only at walking speed. When working, constantly maintain a firm posture and balance.

Lighting
Use the tiller only during daylight or strong artificial lighting.

Store the machine under a roof when not in use
If you are not using the tiller, place it under a roof in a dry location to which children do not have access.

Perform meticulous maintenance of the machine
For the best performance and lowest risk of injury, keep the machine clean and regularly check the extension cord and replace it when it is damaged. Keep the handles dry, clean and unstained by oil.

Pay attention
Pay attention to what you are doing. Apply common sense. Do not use the tiller if you are tired or under the influence of drugs or medication.

⚠ **WARNING:** Do not use the tiller in the vicinity of underground electric or telephone cables, pipes or hoses. If the tiller hits a foreign object, immediately turn it off, wait until the blades come to a stop and check them for damage. If necessary, seek out the services of an authorised service centre. If the tiller begins to vibrate excessively, immediately turn it off and identify the cause. Vibrations usually indicate a problem.

⚠ **ATTENTION: Danger of cuts!** When cleaning or carrying out maintenance on the tiller, use protective gloves and be careful.

Before starting any type of maintenance or repair work on the tiller, turn it off, wait until the blades come to a stop and disconnect it from the power supply.

⚠ **NOTE:** The blades will not come to a stop immediately after the tiller is turned off.

⚠ **NOTE:** Risk of injury. Keep your hands, legs and other parts of your body and clothing always well away from the rotating blades of the tiller.

Packaging

The product is packed in a package that prevents damage during transport. This package is a resource and so can be handed over for recycling.

Operating instructions

Before you start working with the machine, read the following safety instructions and carefully study the fundamentals for work with the machine. Acquaint yourself with the operating elements and the correct use of the machine. Keep the user's manual in a safe place where it can be easily retrieved for future use. Save the original packaging, including the internal packing material, warranty card and proof of purchase receipt at least for the duration of the warranty. If you need to ship this machine, pack it in the original cardboard box to ensure maximum protection during shipping or transport (e.g. when moving or when you need to send this product for repair to a service centre).

📖 **NOTE:** If you hand over the machine to somebody else, do so together with the user's manual. Following the instructions in the included user's manual is a prerequisite for the proper use of the machine. The user's manual also contains operating, maintenance and repair instructions. The manufacturer takes no responsibility for accidents or damages resulting from not following the instructions in this manual.

2. FUNDAMENTALS OF WORK SAFETY

- **Never use the machine if the power cord is damaged or visibly worn out.**
- **In the event that you connect the tiller using a damaged power cord to a power source and then touch the place that is uninsulated before the tiller is disconnected from the power source, you subject yourself to a risk of injury by electrical shock.**
- **Likewise, never touch the blades until the machine is disconnected from the power source and until the blades come to a complete stop.**
- **Make sure that the extension cord never comes into contact with the blades. The blades could damage the insulation on the power cord and this would create a risk of injury by electrical shock when a certain part of the body and the exposed wire touch while it is under live current.**

- **Disconnect the machine from the voltage source (i.e. pull the plug on the power cord out of the mains power socket):**
  - If you need to leave the machine without supervision.
  - If you are planning to carry out troubleshooting.
  - Prior to every inspection, every cleaning or repairs.
  - If you impact a foreign object when working with it.
  - If the machine vibrates excessively.

⚠ **RECOMMENDATIONS**: Connect the machine only to such a power source that is equipped with a residual current device (RCD) with a maximum leakage current of 30 mA.

- If the power cord is damaged, it must be replaced by the manufacturer or by an authorised customer service.

- This machine must not be operated by persons with limited physical, sensory or mental abilities (including children). Furthermore, it must not be used by inexperienced persons whose technical knowledge for the operation of this machine is insufficient. These persons may operate the machine under the supervision of a competent person or after being duly instructed about the fundamentals of work safety.

- If children are moving around in the vicinity of the machine, it is necessary to watch that they do not play with the machine.

- A tingling sensation in one's hands or their numbness are indications of excessive vibrations. If this happens, shorten the work cycle, take sufficiently long breaks, share the work among several people or in the event of long term use of the tiller, use special anti-vibration gloves when working.

- An unavoidable associated consequence of using the tiller is that it emits noise when it is running. Therefore, perform noisy work only during dedicated hours, respectively at a time when this type of activity is normal. Respect quiet times and try to limit the work to the shortest possible duration. Likewise, we recommend that you and persons moving in the direct vicinity of the tiller should wear ear protection.

- Do not use the electric tiller with damaged, deformed or worn out safety mechanisms (start safety switch, safety cover) and/or blades. To avoid incorrect balance, faulty parts and bolts must be replaced in sets without exception.

- Prior to starting work, look for and remove foreign objects (for example stones, branches, etc.).
- If during work you hit an obstacle or if the blades jam up then turn the electric tiller off, pull the power plug out of the socket and wait until the blades come to a stop. Then remove the obstacle. Check the electric tiller for damage and if necessary seek assistance at an authorised service centre.

- Only use the electric tiller for purposes described in this user's manual.
- Do not pull the tiller along a hard surface (concrete, footpaths) or up/down stairs. Do not overload the motor. Do not place any additional weight on the tiller. After you have finished using the tiller, disconnect it from the power supply and check the machine and in particular the blades for damage and if necessary seek out an authorised service centre.

- Be particularly careful when walking backwards. You could stumble!
- When working on a slope, always work perpendicular to the slope and maintain a safe and firm posture.
- Pay increased attention when changing direction on a slope and do not work on extremely steep slopes.
- Work only under good visibility.

Work clothes/work area

- You are responsible for safety in the work area.
- Make sure that there are no people (especially children) or animals in the vicinity of the work area.
- Wear robust work boots and long pants to provide protection to your legs. Never use the tiller when wearing sandals or barefoot.
- Keep hands and feet away from the blades – in particular when starting the machine! Keep the extension cord away from the blades.
- Acquaint yourself with the surroundings and be aware of potential risks which could be ignored due to the noise of the machine.
- Never use the machine when it is raining or in a damp or wet environment. Never work in the direct vicinity of swimming pools and garden ponds.

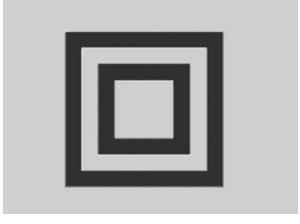
Interrupting work

- Never leave the electric tiller in the work area without supervision.
- When you interrupt work, always leave the electric tiller in a safe location and disconnect it from the power supply.
- When moving the tiller from one work area to another, turn it off and wait for the blades to come to a stop. Disconnect the power cord.

Other risks

- Despite the fact that our products are designed to meet the valid technical norms and safety directives in force, there still remain certain risks to the user associated with the operation of the machine:
  - Stones and other fragments may fly out of the area of the blades.
  - If the operator of the machine fails to use hearing protection, then they risk subsequent deafness.
  - Finger injury during blade maintenance.
  - Inhalation of dust particles created when working with the tiller.
  - Electrical shock when uninsulated parts are touched.

3. SYMBOLS

	Warning: Read the user's manual!
	Do not use in rain or in wet conditions!
	Other people must remain at a safe distance!
	Rotating parts! The blades of the tiller stop only some time after the motor is shut off.
	Always turn the tiller off and disconnect it from the power supply before checking for damage on the power cord or before cleaning the blades.
	Protect the power cord against coming into contact with the blades!
	In accordance with the basic safety standards of European directives in force.
	This machine is protected by double insulation and so it is not necessary to use a grounding wire. Always check that the voltage in the grid corresponds to the voltage on the rating label.
	Use hearing protection! **Use eye protection!** **Use breathing organ protection!**

4. PURPOSE OF USE

The FIELDMANN Electrical Tiller is designed for breaking up larger lumps of soil and hardened chunks of soil on small to medium size horticultural areas, home gardens and garden allotments. It is not intended for use on public fields, in parks, sports centres, on roads, in agriculture or forestry.
The electric tiller must not be used to smash stones or for ploughing up grass areas!
Following these instruction is a prerequisite for the correct use of the electric tiller.

5. DESCRIPTION OF THE MACHINE

1. **Top part of the handle**
2. **Power switch**
3. **Clamp for securing the power cord against pulling**
4. **Middle part of the handle**
5. **Power cord holder**
6. **Bolt M6 x 45**
7. **Wing nut**
8. **Bottom part part of the handle**
9. **Wheel**
10. **Wheel frame**
11. **Lock button**
12. **Motor cover**
13. **Motor bearer plate**
14. **Blade (right/left)**

6. ASSEMBLY

Before using the product, it is necessary to assemble it correctly.

1. Slide the wheels on to the wheel axle, then attach washers and bolts (M5 x 12) to secure them in place. (Fig. 2-1)
2. Push the wheel covers into the wheels and cover the axle ends. A hammer may be necessary to securely seat the wheels. (Fig. 2-1)
3. Attach the middle part of the handle (4) to the bottom part of the handle (8) using two bolts M6 x 45 (6) and wing nuts (7). (Fig. 2-2)
4. Slide the power cord holder (5) on to the top part of the handle (1). (Fig. 2-3)
5. Attach the top part of the handle (1) to the middle part of the handle (4) using two bolts M6 x 45 (6) and wing nuts (7) (Fig. 2-4).
7. Mount the main handle on to the top part of the handle using the four supplied bolts (ST4 × 20). (Fig. 2-5)
8. To secure the power cord, use the two supplied clamps for securing the power cord against pulling (3). (Fig. 2-6)

⚠ **WARNING:** If any parts are damaged or missing, do not work with the product until they are replaced. Not respecting this warning may result in serious injuries. Call our customer line for support.

⚠ **WARNING:** Do not attempt to modify this product or to make accessories that are not recommended for use with this product. Every such change or modification constitutes incorrect use and may lead to a dangerous condition, which may result in serious injuries.

⚠ **WARNING:** Do not connect the machine to a power source until it is fully assembled. Not adhering to this instruction may lead to accidentally starting the machine and possible serious injuries.

7. BEFORE TURNING ON THE ELECTRIC TILLER

⚠ **ATTENTION: Never remove or short-circuit the safety features mounted on the electric tiller (for example fastening the push button/lever to the handle).**

⚠ **ATTENTION: The blades of the tiller will continue to rotate for a short time after it is turned off! Never lift or carry the tiller with the motor running. When turning it on, make sure that your feet are at a safe distance from the tiller blades.**

⚠ **ATTENTION: Always lead the tiller by the handles with both hands. Lead the tiller only at walking speed.**

Before turning on the tiller, make sure that the blades are not touching any object and that they can move freely. Hold the handle firmly with both hands. Never work with the tiller with only one hand.

⚠ **ATTENTION**: The tiller may jump up and/or forwards if the blades hit very hard or frozen soil or if there are hidden obstacles on the soil such as large stones, roots or tree stumps.

Power cord of the machine

Use only undamaged power cords.
The total length of the power cords must not exceed 40 metres because exceeding this distance will result in reduced motor performance. The power cord must have a cross-section of 3 × 1.5 mm^2.
The power cord plugs and sockets must be made from rubber and resistant against spraying water. Longer power cords require larger wire cross-sections. The power cord and the connecting leads must be checked regularly for damage. Before checking the leads, check that they are not under live current. Fully unwind the power cord. Also check the entry locations of the cords, plugs and sockets.

8. OPERATION

Starting

Before starting the tiller, check that the wheel frame is raised. To raise the frame, pull out the lock button (Step A); rotate the wheel frame upwards (Step B); release the lock button. The wheel frame will be secured in position by the lock button. (See fig. 3.)

Secure the extension cord in the power cord holder (5), see fig. 4.
The loop on the extension cord must be sufficiently long so that the power cord holder can move from one side to the other. Connect the extension cord to the power cord on the tiller.

Use the tiller for breaking up clumps of soil, for preparing garden beds for sowing, cultivating gardens and flower beds. The tiller can also dig small holes for planting trees or flowers in flower pots.

Before starting the motor, first move the tiller to the location where you will work.

Hold the tiller firmly when starting it. When running, the tiller blades will pull forward. Using the handle, slowly tilt the blades down.

To start the tiller, press the safety button (A) on the safety switch and then pull the lowering lever (B) towards the handle. The motor will start and the blades will start rotating. To turn off the tiller, simply release the starting lever, see fig. 5.

To break up clumps of soil or for deep loosening, allow the tiller to pull your hands to the end of their reach and then firmly pull the tiller back towards yourself. You will achieve the best results by repeatedly allowing the tiller to move forward and then pulling it back towards yourself again.

The movement of the tiller towards you will achieve more aggressive and deeper ploughing by the blades.

Be very careful to avoid tripping when moving backwards and when pulling the tiller towards yourself.

In the event that the tiller sinks deep into the soil and stays in the one location, rock it gently from side to side until it again starts moving forward.

Never travel over the power cord with the tiller. Check that the power cord is always in a safe position behind you.

When working on a slope, always stand diagonally to the slope to maintain a firm safe stance. Do not work on extremely steep slopes.

9. OPERATION

To prepare a garden bed for sowing, it is recommended to use on of the following patterns:

Loosening pattern A – Travel over the loosened area twice, the second time in cross direction to the first run, see fig. 6.

Loosening pattern B – Travel over the loosened area twice, the second time overlap the first run, see fig. 6.

Before use, remove all visible stones or other foreign objects.

⚠ **NOTE:** Before moving the tiller from one area to another, turn the motor off and wait until the blades stop rotating. Be careful that the blades do not touch the ground while the tiller is being moved. The blades and the machine itself may be damaged even when the motor is turned off.

Removing foreign objects

During operation a stone or root may become stuck in the blades or high grass or weeds may become tangled around the shaft. To clean the blades or the shaft, first release the starting lever, wait until the blades come to a complete stop and disconnect the tiller from the power supply. Release or remove foreign objects from the blades or the shaft. To make the removal of tall grass of weeds easier, remove one or several of the blades.

10. MAINTENANCE

Disconnect the power source before performing maintenance.
While performing maintenance use protective gloves.

Before every use, check that the extension cord exhibits no signs of damage or ageing. Replace the power cord if it is frayed or otherwise damaged. Check the condition of the blades and ensure that all threaded connections are pulled tight. If the blades are blunt, sharpen or replace them. For support, call an authorised service centre.

Only replace worn out or damaged parts with original spare parts. Parts from a different tiller/cultivator may not necessarily be compatible, which may result in a dangerous situation.

Check that all safety mechanisms are safe and in good condition. Repair or replace it if necessary. Lubricate the blades and shaft once per season. Before putting the tiller away at the end of the season, check that it is not damaged. Repair or replace damaged parts.

⚠ **ATTENTION:** Clean the tiller after every use. Neglecting proper cleaning may result in damage to the tiller or a reduction in its performance. Clean the bottom motor bearer plate and the blade cover with a brush and a soft wiping cloth dipped in a soap and water solution.

Never use a hose with water to clean the tiller! Never wash the tiller under running water, in particular with pressurised water.

If you want to remove soil and dirt from the gearbox and blades, use a stiff brush or a dampened cloth. Clean the holes on the motor cover and remove all grass and dirt remains. After cleaning the blades and shaft, immediately wipe them dry and apply a thin layer of oil to prevent corrosion.

Installing and removing the blades
For this task, we recommend that you contact an authorised service centre.
Worn out blades provide only a low level of performance and overload the motor.
Check the blades before each use. Sharpen or replace the blade if necessary. For support, contact an authorised service centre.

⚠ **WARNING:** Injuries may occur when working on the blades. Use protective gloves.

To remove the blade from the shaft (Fig. 7), screw out the hex bolt M8 x 40 from the shaft. Take the blades off the shaft. To install the blades, proceed in reverse order.

Adding oil to the gearbox (Fig. 8):
The drain screw is located on the right side of the gearbox. Before screwing out the drain screw, place the tiller on its left side and clean away any dirt from the gearbox. If necessary, remove the blades to gain better access to the drain screw. Use a 5 mm Allen key to remove the screw. Drain the oil from the gearbox. Fill with high quality SAE 30 oil until it starts flowing out of the hole. Screw the drain screw back in.

11. STORAGE CONDITIONS

⚠ **ATTENTION: Risk of fire! The gearbox may be very hot both during and after use. Store the tiller at a safe distance from fuels, oils, Vaseline and gasses.**

Thoroughly clean the entire machine and its accessories.
Store it out of reach of children in a stable safe position in a cool dry location, avoid both excessively high and excessively low temperatures. Protect it against the effects of direct sunlight. If possible, store it in the dark. Do not store in plastic bags to prevent the accumulation of moisture.

At the end of every season, perform a general inspection of the machine and remove any deposits that may have accumulated. At the start of every season, make sure that you have checked the condition of the machine. If repairs are necessary, please contact one of our service centres (address is on the warranty card).

Store the tiller in a clean dry location to which children do not have access.
For long term storage, ensure that the tiller is protected against corrosion and frost.

At the end of a season or if you will not be using the tiller for longer than a month, wipe all metal surfaces with a cloth dipped in oil or spray it with a thin layer of oil to protect it from corrosion. Fold down the handle and store the tiller in a suitable location.

12. TROUBLESHOOTING

Problem	Possible causes	Remedy
The motor will not start	The machine is not connected to a power supply	Connect the machine to a power supply
	There is no voltage in the mains	Check the power supply
	Faulty power cord	Check the power cord. Repair or replace it if necessary.
	Faulty safety switch/plug	Visit an authorised service centre
	Fuse against overheating was activated	1. The working depth is too big, set a smaller depth. 2. The blades are blocked, remove the obstacle. 3. The soil is too hard, select the correct working depth and move the machine forwards and backwards while at the same time reducing the working speed. Wait approximately 15 minutes for the motor to cool down before using it again.
Excessive noise	Blades are jammed	Turn the machine off. Wait until the blades come to a complete stop. Remove any material stuck inside.
	Leaking oil	The tiller must be repaired. Call our customer line for support.
	Missing bolts, nuts or other parts.	Tighten all the parts. If the noise persists, organise repairs.
Excessive vibrations	The blades are damaged or worn out	Replace the damaged or worn out blades.
	Working depth is too large	Set the correct working depth.
Poor work results	Working depth is too small	Set the correct working depth.
	Worn out blades	Replace the damaged or worn out blades.

13. TECHNICAL SPECIFICATIONS

Model	FZK 2005 E
Power supply	230–240 V, 50 Hz
Power input	1400 W
Idling speed	280 rpm
Coverage width	400 mm
Working depth	21 cm
Number of blades	6 pcs
Weight	11 kg

Noise emission level according to norm

LpA (acoustic pressure)	80.0 dB(A)
LwA (acoustic power level)	91.2 dB(A)
Guaranteed level of acoustic power is LwA	MAX 96 dB(A)

Level of vibrations

on the left	1.142 m/s^2	K= 1.5 $m/^2$
on the right	1.150 m/s^2	K= 1.5 $m/^2$

14. DECLARATION OF CONFORMITY

FAST ČR, a.s.
Černokostelecká 1621, 251 01 Říčany Prague, tel.: 323 204 111, fax: 323 204 110
E-mail: info@fastcr.cz
Cejl 31, 602 00 Brno, tel.: 531 010 292-3, fax: 531 010 294
E-mail: brno@fastcr.cz

CE DECLARATION OF CONFORMITY

Manufacturer:
FAST ČR, a.s.
Černokostelecká 2111, 100 00 Prague 10, Czech Republic
Tax ID number: CZ26726548

Product/brand: Electric Tiller/FIELDMANN

Type/model: FZK 2005 E
230 V, 1 400 W, 50 Hz

This product meets the directives below:

ES Low Voltage Electrical Equipment Directive No. 2006/95/ES
ES Machinery Council Directive 2006/42/ES
ES Electromagnetic Compatibility (EMC) Directive No. 2004/108/ES
ES RoHS Directive No. 2002/95/ES

and norms:

EN 60335-1:2002+A1+A11+A12+A13+A14+A15
EN 709:1997+A4
EN 62233:2008
ZEK 01.4-08/11.11
EN 55014-1:2006+A1+A2
EN 55014-2:1997+A1:2002
EN 61000-3-2:2006+A1+A2
EN 61000-3-3:2008

CE mark: 14

FAST ČR, a.s. is authorised to act on behalf of the manufacturer.

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Name: Ing. Zdeněk Pech
Chairman of the Board of Directors

Signature:

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15. DISPOSAL

Instructions and information about the handling of used packaging
Take the packaging material to a designated municipal waste facility.

The machine and its accessories are manufactured from various materials, e.g. metal and plastic. Take damaged parts to a recycling centre. Inquire at the relevant government department.

This product meets all the basic requirements of EU directives that apply to it.

Changes in the text, design and technical specifications may be made without prior notice and we reserve the right to make these changes.

User s manual in the original language.

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